

## Sediment Transport Monitoring and Analysis

### *Lagunitas Creeks Bed Conditions Monitoring Program, Marin County, California*



Establishing transects for stream bed studies

#### *Project Highlights*

- Bed conditions reconnaissances are conducted to map new sources of coarse sediment, to identify sand and gravel inflow from tributaries, to assess effectiveness of natural and constructed large wood jams on pool depths, and to describe factors affecting other bed conditions
- 55 cross sections are surveyed
- The percentage of the bed covered by sand, silt + clay, woody debris and bedrock are measured
- Samples of sediment stored in pools beneath the bed-surface layer are collected and sieved
- The lithologies (rock types) of the bed sediments are quantified under microscopy to help evaluate sources
- Cobble abundance and embeddedness are censused,
- Scour chains are used to monitor maximum scour at spawning sites

#### *Background:*

Since 1979, Balance Hydrologics has been monitoring bed conditions as part of a long term study of bed conditions affecting salmon and steelhead habitat in Lagunitas Creek downstream from Kent Lake, sponsored by the Marin Municipal Water District (MMWD) and the Marin County Resources Conservation District.



Sampling bulk stream material for analysis



Preparing bulk sediment samples for sieve analysis